

1. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, having a distal end, and having:
 - a) a first ultrasound transducer disposed proximate the distal end and having a substantially-fully-cylindrical ultrasound-emitting surface which is substantially coaxially aligned with, and outwardly-facing from, the longitudinal axis;
 - b) a second ultrasound transducer having a substantially-fully-cylindrical ultrasound-emitting surface which is substantially coaxially aligned with, and outwardly-facing from, the longitudinal axis; and
 - c) a third ultrasound transducer disposed longitudinally between the first and second ultrasound transducers and having an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion.
2. The ultrasound medical system of claim 1, wherein the first ultrasound transducer is disposed at the distal end, and wherein the third ultrasound transducer is disposed proximate the first and second ultrasound transducers.
3. The ultrasound medical system of claim 1, wherein the ultrasound-emitting surface of the third ultrasound transducer is substantially-entirely planar.
4. The ultrasound medical system of claim 1, wherein the ultrasound-emitting surface of the third ultrasound transducer in its entirety has a substantially-cylindrically-focused shape.
5. The ultrasound medical system of claim 1, wherein the ultrasound-emitting surface of the third ultrasound transducer in its entirety has a substantially-spherically-focused shape.

6. The ultrasound medical system of claim 1, wherein the first and second ultrasound transducers are ultrasound-medical-treatment-only ultrasound transducers.
7. The ultrasound medical system of claim 6, wherein the third ultrasound transducer is an ultrasound-medical-treatment-and-imaging ultrasound transducer.
8. The ultrasound medical system of claim 1, wherein at least one of the first, second and third ultrasound transducers has only one ultrasound transducer element.
9. The ultrasound medical system of claim 1, wherein at least one of the first, second and third ultrasound transducers has a plurality of ultrasound transducer elements.
10. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, and having first, second and third ultrasound transducers each having an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion, wherein the first and second ultrasound transducers are ultrasound-medical-treatment-only ultrasound transducers, and wherein the third ultrasound transducer is an ultrasound-medical-treatment-and-imaging ultrasound transducer disposed longitudinally between the first and second ultrasound transducers.
11. The ultrasound medical system of claim 10, wherein the ultrasound transducer assembly has a distal end, wherein the first ultrasound transducer is disposed proximate the distal end, and wherein the third ultrasound transducer is disposed proximate the first and second ultrasound transducers.

12. The ultrasound medical system of claim 10, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together are substantially-entirely planar.
13. The ultrasound medical system of claim 10, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-cylindrically-focused shape.
14. The ultrasound medical system of claim 10, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-spherically-focused shape.
15. The ultrasound medical system of claim 10, wherein each of the first, second and third ultrasound transducers has a plurality of ultrasound transducer elements.
16. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, and having first, second and third ultrasound transducers each having an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion, wherein the first and second ultrasound transducers are ultrasound-medical-treatment-only ultrasound transducers, and wherein the third ultrasound transducer is an ultrasound-medical-imaging-only ultrasound transducer disposed longitudinally between the first and second ultrasound transducers.
17. The ultrasound medical system of claim 16, wherein the ultrasound transducer assembly has a distal end, wherein the first ultrasound transducer is disposed proximate the distal end, and wherein the third ultrasound transducer is disposed proximate the first and second ultrasound transducers.

18. The ultrasound medical system of claim 16, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together are substantially-entirely planar.
19. The ultrasound medical system of claim 16, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-cylindrically-focused shape.
20. The ultrasound medical system of claim 16, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-spherically-focused shape.
21. The ultrasound medical system of claim 16, wherein each of the first, second and third ultrasound transducers has a plurality of ultrasound transducer elements.
22. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, and having first, second and third ultrasound transducers each having an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion, wherein the first and second ultrasound transducers are ultrasound-medical-treatment-and-imaging ultrasound transducers, and wherein the third ultrasound transducer is an ultrasound-medical-treatment-only ultrasound transducer disposed longitudinally between the first and second ultrasound transducers.
23. The ultrasound medical system of claim 22, wherein the ultrasound transducer assembly has a distal end, wherein the first ultrasound transducer is disposed proximate the distal end, and wherein the third ultrasound transducer is disposed proximate the first and second ultrasound transducers.

24. The ultrasound medical system of claim 22, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together are substantially-entirely planar.
25. The ultrasound medical system of claim 22, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-cylindrically-focused shape.
26. The ultrasound medical system of claim 22, wherein the ultrasound-emitting surfaces of the first, second and third ultrasound transducers together in their entirety have a substantially-spherically-focused shape.
27. The ultrasound medical system of claim 22, wherein each of the first, second and third ultrasound transducers has a plurality of ultrasound transducer elements.
28. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, having a distal end, and having two ultrasound transducers, wherein one of the ultrasound transducers has a substantially-fully-cylindrical ultrasound-emitting surface which is substantially coaxially aligned with, and outwardly-facing from, the longitudinal axis, and wherein an other of the ultrasound transducers is disposed longitudinally proximal or distal to the one ultrasound transducer and has an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion.
29. The ultrasound medical system of claim 28, wherein the one ultrasound transducer is disposed proximate the distal end, and wherein the other ultrasound transducer is disposed proximate, and proximal to, the one ultrasound transducer.

30. An ultrasound medical system comprising an ultrasound transducer assembly having a longitudinal axis, and having two ultrasound transducers each having an ultrasound-emitting surface which is substantially-entirely planar or includes at least a concave surface portion, wherein one of the ultrasound transducers is disposed longitudinally proximal or distal to an other of the ultrasound transducers, and wherein the one and the other ultrasound transducers are different types of medical-treatment-only type, medical-treatment-and-imaging type, and medical-imaging-only type transducers.
- 31 An ultrasound medical system comprising a transducer assembly having a longitudinal axis, having a distal end, and having:
 - a) a first RF (radio-frequency) medical-treatment electrode; and
 - b) an ultrasound medical transducer disposed longitudinally proximal or distal to the first RF medical-treatment electrode.
32. The ultrasound medical system of claim 31, wherein the first RF medical-treatment electrode is disposed proximate the distal end, and wherein the ultrasound medical transducer is disposed proximate, and longitudinally proximal to, the first RF medical-treatment electrode.
33. The ultrasound medical system of claim 31, also including a second RF (radio-frequency) medical-treatment electrode, wherein the ultrasound medical transducer is disposed longitudinally between the first and second RF medical-treatment electrodes.
34. The ultrasound medical system of claim 31, wherein the first RF medical-treatment electrode is disposed at the distal end and tapers to a tissue-penetrating edge.